(SI)

FINAL REPORT FOR CHEMETCO, INC. APRIL 12, 1987

CHEMETCO, INC.
HARTFORD, ILLINOIS
F05-8703-418

ILD048843809

Prepared by Philip A. Smith
Ecology and Environment, Inc.
September 30, 1987

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OneStep®
INDEX SYSTEM

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INTRODUCTION

Chemetco, Inc. (Chemetco) operates a secondary copper smelter in Hartford, Illinois (SE1/4,Sec.16,T.4N.,R.3E., Madison County). Hartford is located north of Alton, Illinois, near St. Louis, Missouri. Chemetco is a major producer of high purity copper, lead, tin, nickel, and their alloys derived from recycling. The operation is regulated by the Resource Conservation and Recovery Act (RCRA) as a treatment and storage facility for hazardous waste. A vicinity map is shown in Figure 1 and Figure 2 provides a map of the facility.

SITE HISTORY

The company was incorporated June 9, 1969, as Chemetco Metals Corp. and began copper production in March 1972. In 1973, the corporation changed its name to Chemetco, Inc.

Chemetco was recognized as a potential dioxin site in early 1987 following two dioxin studies of IBS, Inc., of Peoria, Illinois by a U.S. Environmental Protection Agency (U.S. EPA) Tier Four dioxin study. IBS was a metal salvage facility that reclaimed metals primarily from automobiles but had also processed junk wire and transformers from Illinois power plants. Their refining process involved simple incineration, in which metals were recovered by burning off all combustibles. Incinerator ash at IBS was found to contain 20 ppb tetrachlorodibenzo-p-dioxin (2378 TCDD) by the initial U.S. EPA study. A later U.S. EPA study revealed up to 9.5 ppm 2378-TCDD in site soils at IBS.

Acting on those results, U.S. EPA tracked the movement of materials out of IBS and discovered that copper scrap and incinerator ash were periodically shipped to Chemetco. According to IBS, some, but not all of these shipments included packages of incinerator ash. The quantity of incinerator ash shipped from IBS to Chemetco cannot be determined. The U.S. EPA then tasked Ecology and Environment, Inc., Field Investigation Team (FIT) to design and perform a dioxin study at Chemetco.

PROCESS

Chemetco's smelting process utilizes copper materials from a variety of sources, including electrical and electronic equipment, skimmings, slags, turnings, grindings, and other residues from foundries and factories, auto parts and building components.

Figure 3 illustrates the Chemetco smelting process in a simplified manner. Copper-bearing raw materials are sent through two smelting furnaces, the second being a higher temperature furnace. The resulting product is 99% pure copper. This copper is then molded into anodes and transferred to an eletrolytic bath where electrolysis forms the 99.98% pure copper cathodes. Also illustrated on the diagram are points where products are discharged from the system. Currently, the process ends after the second furnace stage, in which 99% pure copper is the final product.

If dioxin were present in the IBS product refined by Chemetco and if traced through the smelting process (Figure 3), it may have been vaporized and carried with flue gases from smelting furnace #2 to the wet scrubber, and then discharged with flue gases from the wet scrubber.

OBJECTIVE

The objective of FIT work at Chemetco was to determine the presence or absence of dioxin.

Soil sampling was performed on April 12, 1987. Five samples were chosen to encompass a variety of outlets of the smelting process. (Sample locations are identified in Figure 2). Samples included smelting waste (refining slag), cooling water (sampled indirectly from cooling water canal sediment), and scrubber wastes (polish pit sediment and zinc oxide). A composite sample was also taken of sediment on the unloading (staging) area for stored incoming wastes.

Sample collection procedures are given in Appendix A and sampling equipment is listed in Appendix B.

SITE ACTIVITIES

Region V FIT personnel conducted the sampling on April 12, 1987. Samples were split with Chemetco and also representatives hired by Chemetco.

Region V FIT personnel involved in sampling were:

1. Tim Boos — Team Leader
2. Craig Almanza — Team Member
3. Phil Smith — Team Member
4. Tim Maley — Site Safety Officer
5. Kelly Walker — Sampler
6. Dirk Kaiser — Team Member

A slag sample (SAS2882E05) was taken from a randomly picked bag of slag housed in a shed near the plant entrance. The shed houses slag samples generated by a statistically based program that Chemetco and the University of Illinois, Edwardsville performed in January 1985. Slag is a by-product of the smelting step.

Sample locations are displayed in Figure 2. Listed below is a summary of sample types.

Sample	Sample Number	Type	Analysis Conducted
Sediment-polish pit	SAS2882E01	grab	2,3,7,8-TCDD and other dioxin and furan isomers.
Sediment-recirculation canal	SAS2882E02	grab	"
Sediment-staging area	SAS2882E03	composite	"
Sludge-sludge bunker	SAS2882E04	composite	"
Slag-ZnO2	SAS2882E05	composite	"

RESULTS

Results of the analyses indicate no 2378-TCDD present, but a number of dioxin isomers are present in four of the samples. Table 1 summarizes the results.

The 2378-TCDD toxic equivalence of these isomers was computed for samples SAS2882E01 through SAS2882E04 (SAS2882E05 showed negligible isomers) (Table 2 provides results). Results indicate the highest equivalence rating is 2.4 ppb for SAS2882E01 (provided below).

Sample Number	2,3,7,8-TCDD ppb*	2,3,7,8-TCDD equivalent (ppb)
SAS2882E01	ND**	2.4152
SAS2882E02	ND	0.2532
SAS2882E03	ND	0.1150
SAS2882E04	ND	0.6134
SAS2882E05	ND	0.00

* Samples are reported on a dry weight basis.
** ND - Not detected.

SUMMARY

Sample results show dioxin isomers on-site at the polish pit, old recirculation canal, staging area, and the sludge bunker. The highest levels were at the polish pit, where 2378-TCDD toxic equivalence is 2.4 ppb. All others are less than 1.0 ppb.

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TABLE 1

4/12/87 SAMPLING RESULTS IN PARTS PER BILLION

	SAS2882E01	SAS2882E02	SAS2882E03	SAS2882E04	SAS2882E05
2378-TCDD	ND	ND	ND	ND	ND
Total TCDD	15.108	0.632	0.297	1.650	ND
12378-PCDD	0.382	0.034	0.036	0.088	ND
Total PCDD	12.905	0.989	0.435	7.000	ND
123478-HxCDD	0.511	0.063	0.029	0.125	ND
123678-HxCDD	1.173	0.152	0.091	0.280	ND
123789-HxCDD	1.812	0.226	0.140	0.396	ND
Total HxCDD	16.645	1.993	0.988	3.362	ND
1234678-HpCDD	10.743	1.678	1.080	2.773	ND
Total HpCDD	20.955	3.269	2.071	5.487	ND
OCDD	20.527	5.053	4.291	9.262	0.058
2378-TCDF	15.972	1.996	0.669	4.396	ND
Total TCDF	71.147	8.874	3.151	20.790	ND
12378-PCDF	2.103	0.259	0.091	0.467	ND
23478-PCDF	6.193	0.692	0.250	1.560	ND
Total PCDF	48.197	5.049	2.184	11.472	ND
123478-HxCDF	10.676	1.426	0.601	2.499	ND
123678-HxCDF	3.744	0.538	0.211	0.960	ND
234678-HxCDF	8.475	1.171	0.468	2.133	ND
123789-HxCDF	0.675	0.083	ND	0.153	ND
Total HxCDF	48.344	6.317	2.560	11.507	ND
1234678-HpCDF	30.401	4.378	1.991	7.267	0.022
1234789-HpCDF	8.209	1.077	0.349	1.736	ND
Total HpCDF	58.975	8.406	3.411	14.385	0.024
OCDF	64.718	9.532	3.281	17.183	0.050
2378TCDD equivalents (rounded)	2.42	0.25	0.12	0.61	NP*
2378TCDD equivalents	2.4152	0.2532	0.1150	0.6134	NP

* ND - Toxic equivalence computation not performed.

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TABLE 2

DIOXIN ISOMERS AND 2378-TCDD EQUIVALENTS (ppb)

	SAS2882E01	SAS2882E02	SAS2882E03	SAS2882E04	SAS2882E05
2378-TCCD	0.0	0.0	0.0	0.0	0.0
Other TCDD	15.1	0.6	0.3	1.6	0.0
2378-TCDF	16.0	2.0	0.7	4.4	0.0
Other TCDF	55.1	6.9	3.2	16.4	0.0
2378-PCDD	0.4	0.0	0.0	0.1	0.0
Other PCDD	12.5	1.0	0.4	1.9	0.0
2378-PCDF	2.1	0.2	0.1	0.5	0.0
Other PCDF	46.1	4.8	2.1	11.0	0.0
2378-HxCDD	1.8	0.2	0.1	0.4	0.0
Other HxCDD	14.8	1.8	0.9	3.0	0.0
2378-HxCDF	0.7	0.1	0.0	0.2	0.0
Other HxCDF	47.6	6.2	2.6	11.3	0.0
2378-HpCDD	0.0	0.0	0.0	0.0	0.0
Other HpCDD	21.0	3.3	2.1	5.5	0.0
2378-HpCDF	0.0	0.0	0.0	0.0	0.0
Other HpCDF	59.0	8.4	3.4	14.4	0.0
OCDD	20.5	5.0	4.3	9.3	0.0
OCDF	64.7	9.5	3.3	17.2	0.0
Sum of 2378-TCDD Equivalents	2.4152	0.2532	0.1150	0.6134	0.0

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APPENDIX A

Soil Sample Collection Procedures:

1. Prior to sampling, check to see that the equipment is clean. If it appears dusty or dirty, it is from insufficient cleaning, handling, or packaging. If this is the case, another piece should be used.

2. Before sampling, the grass should be trimmed to just above the soil surface in the areas to be cored.

3. Soil samples will be collected by forcing a bulb planter into the soil to an approximate depth of four (4) inches. Three to five cores may be needed to obtain a sufficient quantity of soil, enough to fill a 1-quart wide mouth glass container half full. This will constitute one grab sample.

4. When the core is extracted, it will be placed in a clean disposable aluminum foil pan. The cores will be mixed with a clean stainless steel spoon and knife. The stones, roots, twigs, grass, and other foreign debris will be discarded with clean stainless steel tweezers or strawberry hullers.

5. Once the grab sample is collected and all debris removed, place the sample into the glass 1-quart wide mouth container that was cleaned and supplied by Versar. After each grab sample is collected, the disposable aluminum pan, bulb planter, tweezers and spoon should be discarded, and new decontaminated equipment used for the next grab sample.

6. Sediments will be obtained from selected sites in sufficient volume to fill the sampling containers. Samples will be collected with stainless steel spoons and initially placed in a clean, disposable aluminum foil pan. Free water will be decanted from the grab sample of sediments prior to

introduction to the sample containers. After each grab sample is collected, the aluminum foil pan and stainless steel spoon should be discarded, and new decontaminated equipment used for the next grab sample.

7. Fill out all necessary field data forms for the sample and attach identifying labels to the sample jars. Initiate a chain-of-custody record for the sample. Pack the samples for shipment including the required field blanks and performance evaluation samples.

8. Prepare site documents. Since it may be necessary to revisit the site in the future to resample, sample activities must be thoroughly documented. At a minimum, a map should be drawn showing approximate sample locations with distances to two or three permanent features (ex. corner of a building, trees, light poles, etc.). A site photograph is required to document the location.

9. Prepare site map. On a 8 1/2 x 11 inch sheet of paper, draw a map of the sampling site showing its general location (include street names), and the positions of any permanent features such as roads, telephone poles, large trees, etc. Also, note anything which might help to make the site easier to locate for any follow up sampling. Each map should contain the following information: city, county, and/or state names, date of sampling, facility, address, name of site, north arrow, and scale, if applicable.

10. Photograph the sampling site. Place the site number on a large card within the area to be photographed and take a color photograph of the site. Indicate the direction of the photo on the sketched site map. If it can be accomplished

easily, try to include identifying landmarks, such as houses, telephone poles, etc., in the photograph. When the pictures or slides have been developed, write the name of the city, county and state, the site number, and the sampling date on the back of the photos or on the front of the slides.

APPENDIX B

Sampling Equipment:

Versar will supply the sample jars. A field blank and a performance evaluation sample will also be submitted for analyses.

There should be very little variation in equipment used in obtaining soil samples. After the sampling locations are chosen, the sample will be collected with a clean bulb planter and placed in the sample jars. To avoid cross contamination among sampling locations, the bulb planter, spoon, knife, tweezer, and the aluminum foil pan will be properly discarded in a 55 gallon drum after sampling at each location. Sampling personnel should inspect all equipment before it is used to ensure it is clean.

A. Cleaning of Sampling Equipment

Each piece of sampling equipment will be cleaned prior to the collection of the samples. This should take place in a relatively clean location, not in field locations.

1. A stainless steel wash basin will be used. 1 1/2 tablespoons of Alconox detergent solution will be added per gallon of hot tap water.
   Scrub sample equipment with a wooden handled bristle brush.

2. Rinse equipment with tap water.

3. Final rinse with distilled water.

4. Air dry equipment. Wrap equipment with aluminum foil - dull side out.

B. Checklist of Supplies and Equipment for Soil Sampling

1. Cleaning Supplies and Equipment
   - Natural bristle brushes/wooden handles
   - Stainless steel wash basins
   - Distilled and tap water
   - Alconox
   - Bulb planters, stainless steel
   - Strawberry hullers, stainless steel
   - Knives, stainless steel, serated
   - Spoons, stainless steel
   - Aluminum foil disposable pans
   - Aluminum foil
   - Sample kit (supplied and cleaned by Versar to include one quart glass jars and teflon-lined lids, tulip bulb planters, and packaging and shipping materials).
   - Gloves, neoprene

2. Miscellaneous equipment

   - Hammer
   - Wood stakes
   - USGS maps
   - Site maps
   - Scale
   - Measuring tape
   - Compass
   - Outdoor thermometer
   - Camera and film
   - Bound field sampling logbook
   - Field data sheets
   - Chain-of-custody records
   - Masking tape
   - Clear plastic tape
   - Strapping tape (for specimen boxes)

- Pencils (use preferred over pens)
- Permanent felt-tip markers
- Ice chests (for shipping and to cool samples)
- Ice, baggies
- Vermiculite for sample containers during shipping
- Shipping instructions and appropriate shipping forms

3. Decontamination of Personnel and Non-Expendable Sampling Equipment

Non-expendable sampling equipment is thoroughly decontaminated after each use to prevent cross-contamination of samples and contamination of personnel. During the set-up of the on-site sampling and packaging station, an area is designated to be the decontamination zone. This area will consist of an initial wash and four rinse steps as follows:

Note: The sampling surface of the equipment to be cleaned will be scrubbed with a wooden handled natural bristle brush and will not be touched by the personnel without protective wear (gloves and tyvek).

Initial Wash: Alconox detergent solution, 1 1/2 tablespoon per gallon tap water in a stainless steel wash basin.

First Rinse: Rinse with tap water. Shake or drip excess water off equipment.

Second Rinse: Rinse with distilled water. Allow to drip dry.

Third Rinse: Rinse using a plastic squeeze bottle containing specially denatured anhydrous ethyl alcohol. Allow equipment to dry.

Fourth Rinse: Rinse using a squeeze bottle containing trichloroethylene-reagent grade.

Allow equipment to dry. Wrap in foil until required for use.

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Site Inspection Report

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Chemetco, Inc.	Route 3 and Oldenburg Rd.

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Hartford	IL	62202	Madison	119	21

09 COORDINATES LATITUDE	LONGITUDE
38 47 30.0	090 05 00.0

10 TYPE OF OWNERSHIP (Check one)
■ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
04 12 87 (MONTH DAY YEAR)	■ ACTIVE ☐ INACTIVE	1972 (BEGINNING YEAR) | Present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ■ B. EPA CONTRACTOR Ecology & Environment (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Tim Boos	Geological Engineer	E+E	(312) 663-9415
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Tim Maley	Geologist	E+E	(312) 663-9415
Craig Almanza	Environmental Technician	E+E	(312) 663-9415
Phil Smith	Geologist	E+E	(312) 663-9415
Dirk Kaiser	Geologist	E+E	(312) 663-9415
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
None - inspection consisted	of dioxin sampling only.		( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	8:00 AM	Sunny, cool 55°F, no breeze

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Don Bruce	USEPA	(312) 886-4746

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Phil Smith	FIT	Ecology & Environment, Inc	(312) 663-9415	9 15 87 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
- ■ A. SOLID
- ■ B. POWDER, FINES
- ☐ C. SLUDGE
- ■ E. SLURRY
- ■ F. LIQUID
- ☐ G. GAS
- ☐ D. OTHER (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
- TONS
- CUBIC YARDS — unknown
- NO. OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)
- ■ A. TOXIC
- ■ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ■ D. PERSISTENT
- ■ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ■ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS	UNKNOWN		Zinc oxide, sulfates
ACD	ACIDS	UNK		sulfuric acid electrolyte
BAS	BASES	UNK		caustic liquors
MES	HEAVY METALS	UNK		iron silicate slag containing metals

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
IOC	2,3,7,8 Dioxin	1746016	concentrations	NO DETECTION	N/A
IOC	2,3,7,8 Dioxin isomers	1746016	observed in FIT	16.0	PPB
IOC	other Dioxin isomers	1746016	sampling of 4/87.	59.0	PPB
IOC	sum of 2,3,7,8	—	from sample E01-		
—	Dioxin equivalents	1746016	polish pit.	2.4	PPB
IOC	zinc oxide	1314132	solid stored in concrete bunker		
IOC	zinc oxide	1314132	slurry disposed in piles		
IOC	nickel sulfate	7786814	spill on-site / off-site '83		
ACD	sulfuric acid	7664939	disposed in unlined pit		
BAS	caustic liquors	UNKNOWN	disposed in settling pond		
MES	iron silicate (Pb, Cd, Zn)	7439921	stored in piles		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Copper containing ash believed to		FDS		
FDS	contain dioxin	1746016	FDS		
FDS	nickel sulfate	7786814	FDS		
FDS	sulfuric acid	7664939	FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1983 Madison County Report
1987 FIT sampling study

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ■ OBSERVED (DATE: 9/8/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2,000 — 04 NARRATIVE DESCRIPTION
Sampling performed by the IEPA and Chemetco reveal Arsenic 40ppm, Copper 3700 ppm, Nickel 5400 ppm, and sulfate 44,100 ppm in the shallow sand and gravel aquifer. Wells sampled were on-site wells monitoring a closed acid disposal pit. Area drinking water wells draw from a deeper sand and gravel aquifer.

01 ■ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: N/A) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: -0- — 04 NARRATIVE DESCRIPTION
NPDES limits were repeatedly exceeded for heavy metals in 1982 - 83. Chemetco discharged plant cooling water into Cahokia Canal which drains into the Mississippi River approximately 1 mile downstream of the discharge point. Cooling water is now recycled. (since 1986) No drinking water intakes are present within 3 miles downstream of site.

01 ■ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: N/A) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6,000 — 04 NARRATIVE DESCRIPTION
Chemetco's air permit regulated particulate discharge from furnaces. A 1983 stack test performed by the IEPA showed compliance. Potential exists for unpermitted release due to incineration of wide range of metal wastes including electrical and factory scrap. Stacks are possible route of incinerated dioxin. (See also Part 4, Fig. 9)

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: N/A) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: N/A — 04 NARRATIVE DESCRIPTION
N/A - Site is not considered a threat by local authorities. There have been no major fires or explosions in the past.

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: N/A) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: N/A — 04 NARRATIVE DESCRIPTION
N/A - Site is completely fenced with a 24-hr guard and surveillance system.

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: 11/21/83) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 40 (Acres) — 04 NARRATIVE DESCRIPTION
Soils from the recirculation canal were sampled by the IEPA and found to contain 63 ppm lead and 10 ppm Cadmium. See also item A above.

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: N/A) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2,000 — 04 NARRATIVE DESCRIPTION
Potential exists for the deep sand and gravel aquifer to be contaminated since the shallow sand and gravel aquifer is contaminated (see item A above). It is unknown whether the shallow and deep aquifers are hydraulically connected.

01 ■ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: N/A) ☐ POTENTIAL ■ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: UNKNOWN — 04 NARRATIVE DESCRIPTION
A former employee alleges that exposure to chemicals during his employment at Chemetco resulted in the medical problems his child now experiences.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 6,000 — 04 NARRATIVE DESCRIPTION
Routes of exposure include ground water, surface water, air, soil, and worker. See items A, B, C, F, G, and H above.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: N/A) ☐ POTENTIAL ■ ALLEGED
04 NARRATIVE DESCRIPTION

On 12/2/80 a local farmer alleged to the IEPA that seepage from the Chemetco site was affecting his food crop growth. IEPA did not confirm the allegation in its follow-up of complaint.

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: N/A) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

The potential exists for animals to consume ponded chemicals or contaminated soils and vegetation.

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: N/A) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

The potential exists for contaminants to enter the food chain via any contaminated crops or vegetation. See item K above.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ■ OBSERVED (DATE: See below) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2,000
04 NARRATIVE DESCRIPTION

Site has a history of unstable containment. 9/82 - IEPA reports contaminated ground water at site. 12/83 - Madison Co. notes cooling water overflow from recirc. canal into adjacent fields. 12/83 - County reports that trench along Old Rd. contains heavy metals. 10/83 - IEPA notes nickel sulfate spill on Oldenburg Rd. 5/83 - IEPA notes zinc oxide runoff from decant pits.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A - No reported incidents. Chemetco owns over 100 acres at the facility.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: N/A) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A - No incidents have been reported.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: N/A) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A - Site is not a disposal facility.

05 DIOXIN HISTORY

There has been no past allegations, inspections, or sampling for on-site dioxin contamination.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 6,000

IV. COMMENTS

Information compiled above was garnered from IEPA files and conversations with local, state, and federal authorities. New information on site activities was also sought for this report.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA file information
RCRA file information
FIT dioxin sampling 4/87

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D0488 43809

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
■ A. NPDES	IL0025747	6/27/85	5/1/90	storm water discharge only
☐ B. UIC				
■ C. AIR	expired	—	—	Last permit app. denied (IEPA)
■ D. RCRA	ILD048843809	8/15/80		Treatment and storage of
■ E. RCRA INTERIM STATUS	ILD048843809	11/17/80		hazardous materials permit.
☐ F. SPCC PLAN				
■ G. STATE Ill. Plant Operating	119801	UNK	UNK	
☐ H. LOCAL (Specify)				
■ I. OTHER Ill. Furnace	119801	UNK	UNK	
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
■ A. SURFACE IMPOUNDMENT	UNKNOWN	
■ B. PILES	UNKNOWN	
■ C. DRUMS, ABOVE GROUND	UNKNOWN	
■ D. TANK, ABOVE GROUND	UNKNOWN	
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ■ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ■ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ■ A. BUILDINGS ON SITE

06 AREA OF SITE

41 (Acres)

07 COMMENTS

This section cannot be adequately addressed in this report given our present file resources and the limited nature of the FIT inspection. The FIT site visit was limited in scope to dioxin sampling only.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one) See comments above

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

N/A See comments above.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ■ NO

02 COMMENTS

Site is completely fenced and is equipped with a surveillance system.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

RCRA permit application
State file information
Personal communication w/ IEPA officials.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL
COMMUNITY	A. ☐	B. ■
NON-COMMUNITY	C. ☐	D. ■

02 STATUS	ENDANGERED	AFFECTED	TESTED ~~MONITORED~~
	A. ☐	B. ☐	C. ■
	D. ☐	E. ☐	F. ■

03 DISTANCE TO SITE
A. 2.5 (mi)
B. 500 (mi) ~~ft.~~

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

■ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 2,000

03 DISTANCE TO NEAREST DRINKING WATER WELL 500 (mi) ~~ft.~~

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
5 (ft)	Southwest	unknown (ft)	unknown (gpd)	■ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)
The city of Hartford draws from 2 municipal wells located at the city water plant. The wells are 110 ft. deep drawing from sand & gravel. Some rural homes draw from private wells of unknown depth.

10 RECHARGE AREA	COMMENTS	11 DISCHARGE AREA	COMMENTS
■ YES ☐ NO	Site area is most probably a recharge area. There are no lakes or swamps on site to indicate discharge.	☐ YES ■ NO	Areas to the south and southwest are low lying and probably local ground water discharge points.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ■ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
Mississippi River	☐	1 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 100 NO. OF PERSONS	B. 240 NO. OF PERSONS	C. 3,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION
500 (mi) ~~ft.~~

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE
150

04 DISTANCE TO NEAREST OFF-SITE BUILDING
500 (mi) ~~ft.~~

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)
The area within 2 miles of the site is mixed rural and industrial. The area is sparsely populated. At 2-3 miles from the site, Hartford, Mitchell, and a portion of South Roxanna are included. These three towns support 85% of the population within 3 miles of the site.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ■ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ■ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
120 (ft)	10 (ft)	2 - 10

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
36 (in)	3 (in)	< 3 %	SW	< 3 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN (levees)

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY N/A

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. N/A (mi)	B. 2 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

UNK (mi)

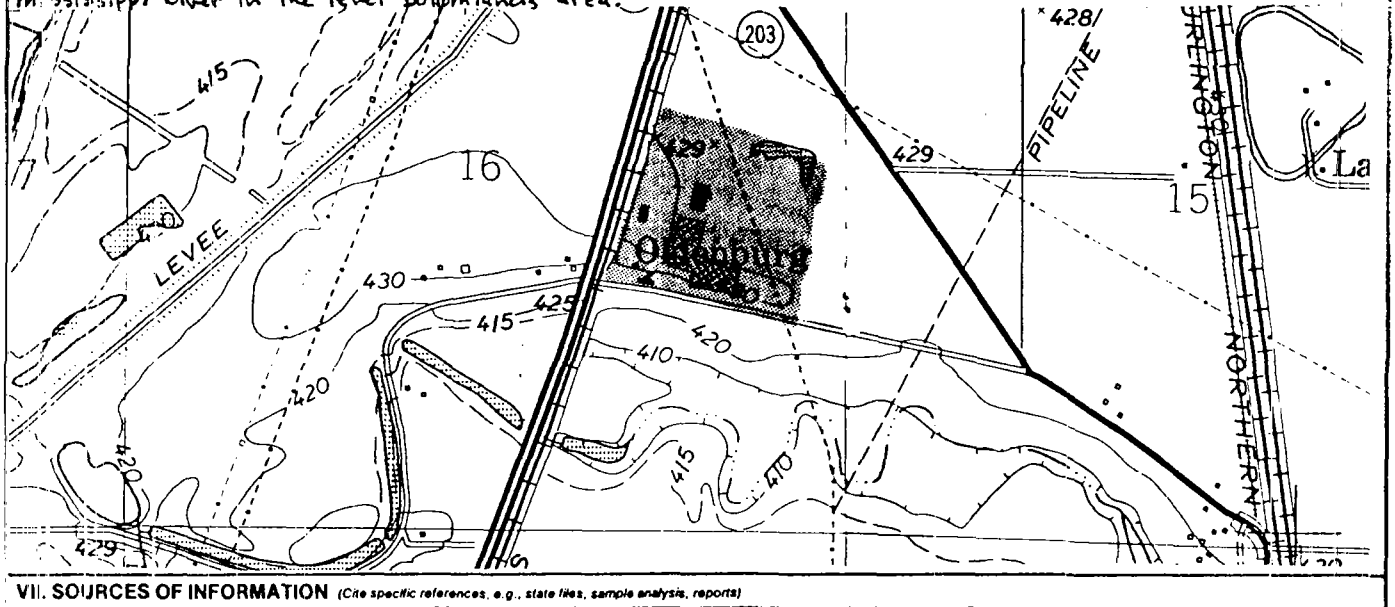
ENDANGERED SPECIES: UNKNOWN

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. .5 (mi)	B. .25 (mi)	C. N/A (mi)	D. .25 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY Site is located just east of flood control levee for the Mississippi River in the Iguel bottomlands area.



VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Revised Part A + B Application for Chemetco, Inc. Nov. '85

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	Triangle Laboratories	July '87
VEGETATION		4915 Prospectus Drive Suite F	
OTHER		Research Triangle Park NC 27709	

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
OVA	no readings above background
rad mini	no readings above background
explosimeter	no reading
O_2 meter	21 % O_2
monitox	no reading

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND □ AERIAL — 02 IN CUSTODY OF Ecology & Environment, Inc. (Name of organization or individual)

03 MAPS ■ YES □ NO — 04 LOCATION OF MAPS Ecology & Environment, Inc.

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

FIT dioxin sampling 4/87

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Chemetco Metals Corp.		P. O. Box 187		Alton	IL	62002
Unknown						

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
None						
Unknown						

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Unknown						

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Unknown						

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

State file information

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D049843809

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER
John Suarez	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
P.O. Box 187	

05 CITY	06 STATE	07 ZIP CODE
Alton	IL	62002

08 YEARS OF OPERATION	09 NAME OF OWNER
15 yrs.	Chemeteo Metals Corp.

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER
None	

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER
None	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Illinois EPA file information

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D048843809

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
N / A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N / A			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N / A			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D048843809

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: Not Applicable - There has been no response activity at Chemetco.

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N / A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N / A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N / A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION: N/A

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D048843809

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA State officials

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D048843809

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ■ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

Presently, the IEPA has an Enforcement Action filed before the Illinois Pollution Control Board.
In Dec. '85 the USEPA filed an Administrative Order against Chemetco, Inc. siting RCRA violations and ordering compliance. The Agency has not filed a complaint. They are working jointly with Chemetco on a clean-up Consent Agreement.

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

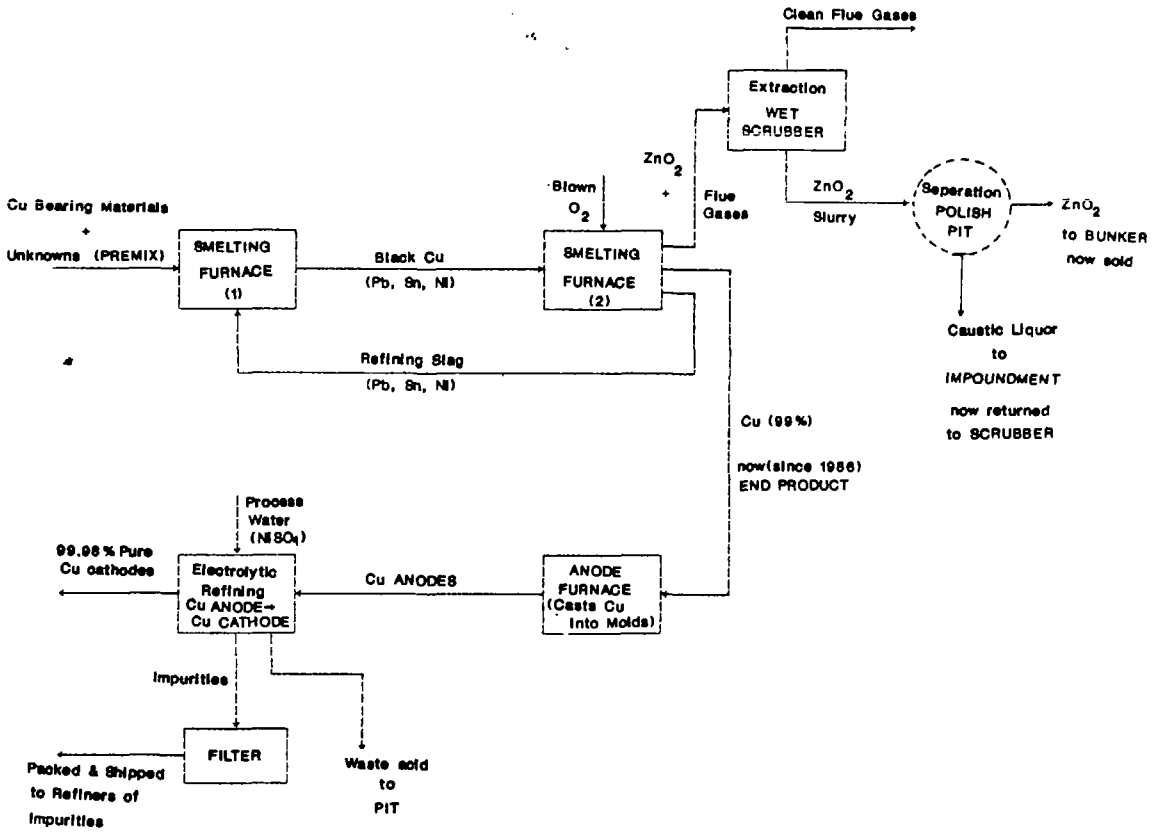
Personal communication w/ IEPA officials.

EPA FORM 2070-13 (7-81)

	High	Moderate	Low
Fire and Explosion Hazard			
Flammable Materials			X
Explosives			X
Incompatable Chemicals acids stored		X	
Direct Contact with Acutely Toxic Chemicals			
Site Security			X
Leaking Drums or Tanks unknown			
Open Lagoons or pits unknown			
Materials on Surface unknown			
Proximity of Population			X
Evidence of Casual Site Use unknown			
Contaminated Water Supply			
Exceeds 10 Day Snarl N/A			
Gross Taste or Odors none observed			
Alternate Water Available none			
Potential Contamination nearby private wells		X	
Is the site abandoned or (active?)			

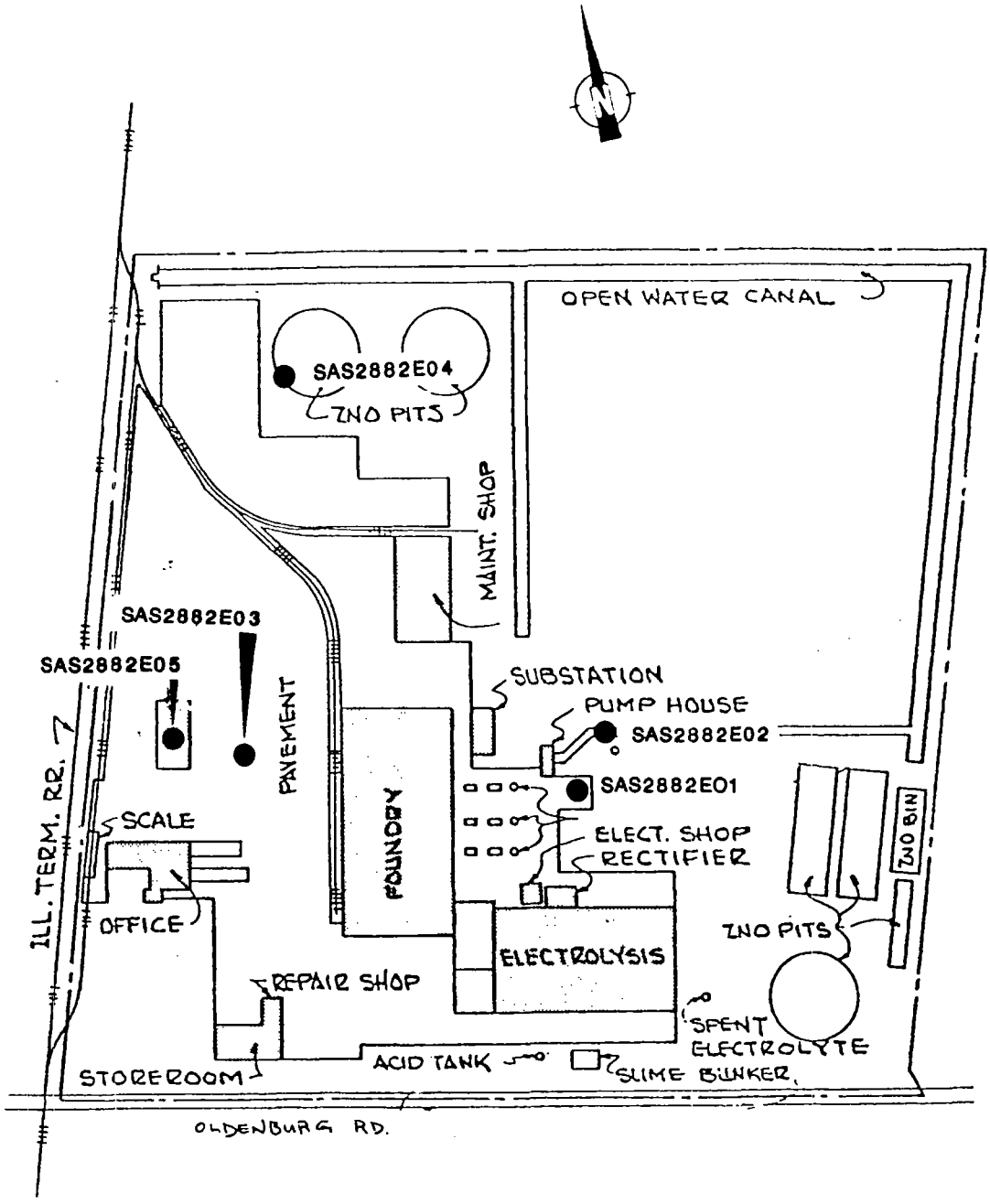
Comments

Site is regulated under RCRA as a treatment and storage facility.



ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL 312-663-9415

TITLE: PROCESS FLOW CHART	FIGURE #: 3
SITE: CHEMETCO, INC.	SCALE: -----
CITY: HARTFORD, STATE: IL	P.A.N.: IL0523VA
SOURCE: BASED ON IEPA FILE INFORMATION	DATE: 9/87
	REVISED: ----



SITE PLAN

SCALE ~ 1" = 200'

● FIT SAMPLING LOCATIONS

SAS2882E01
SAS2882E02
SAS2882E03
SAS2882E04
SAS2882E05

ecology and environment, inc. 111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415	
TITLE: SITE MAP	FIGURE #: 2
SITE: CHEMETCO, INC.	SCALE: 1 IN = 200 FT
CITY: HARTFORD STATE: IL	P.A.N.: IL0523VA
SOURCE: RCRA FILES	DATE: 11/85
	REVISED: 9/87

PAGE _____

SITE: Chemetco, Inc.
Rte 3 and Oldenburg Rd.
Hartford, IL 62202

TDD: F05-8703-418

PAN: IL0523SS
ILD048843809

SAMPLE: SAS2882E03

SAMPLER: Almanza

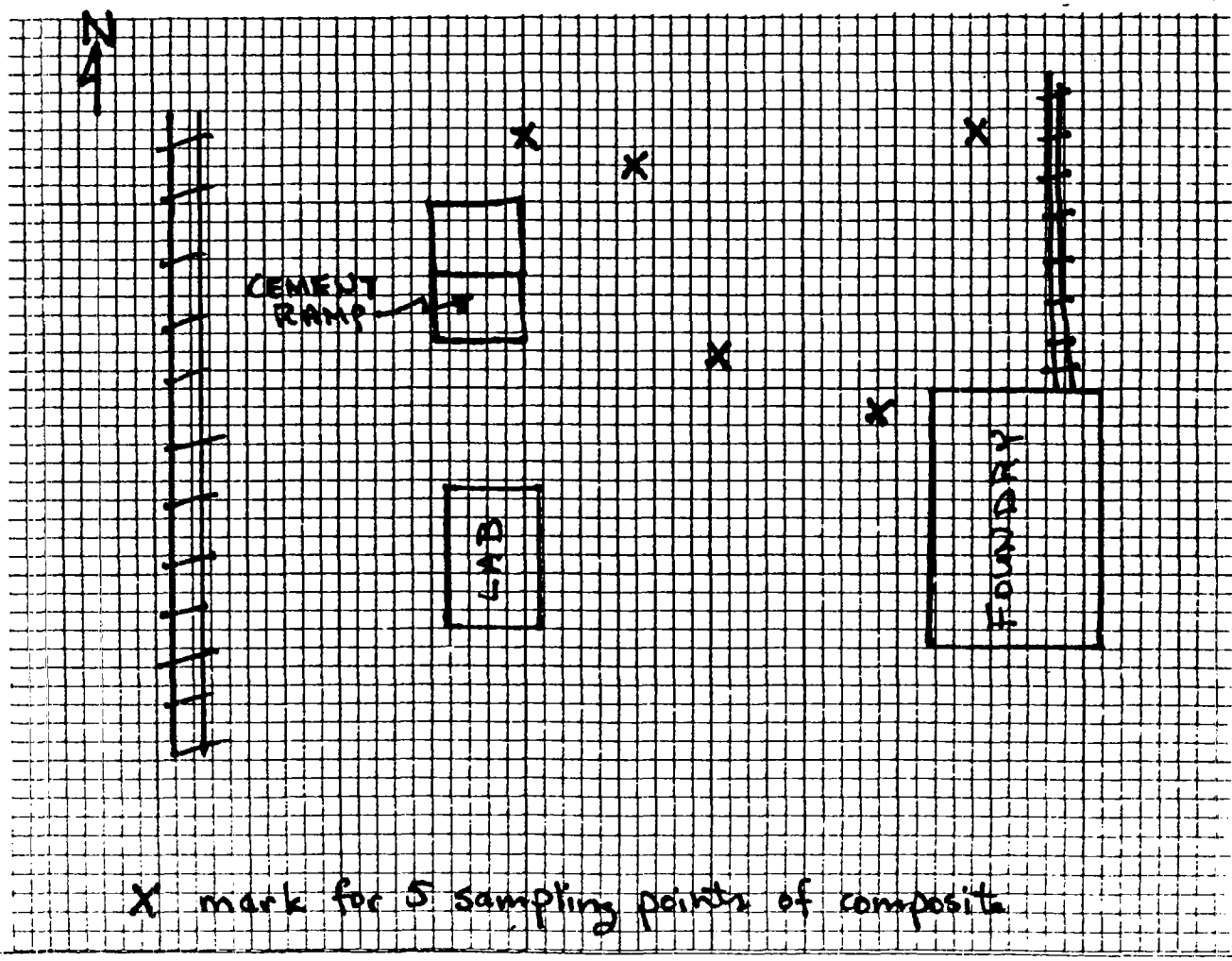
DATE: April 12, 1987

TIME: 0830 (AM) PM

METHOD OF SAMPLE COLLECTION: Composite

PHOTOGRAPHY (including directions): _____

SAMPLE LOCATION



X mark for 5 sampling points of composite

FIELD PHOTOGRAPHY LOG SHEET PAGE ____

DATE 4/12/87

TIME 9:05 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny
55°F, no wind

SITE Chemetco, Inc.

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boos

SAMPLE ID# (if applicable)
SAS2882E04

DESCRIPTION: Soil sample 04 taken from 3 points in sludge bunker.

DATE 4/12/87

TIME 9:05 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny,
55°F, no wind

SITE Chemetco, Inc

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boos

SAMPLE ID# (if applicable)
SAS2882E04

PHOTO None Available

DESCRIPTION: The closeup photo of 04 was double exposed so could not be included in this report.

PAGE _____

SITE: Chemetco, Inc.
Rte 3 and Oldenburg Rd.
Hartford, IL 62202

TDD: F05-8703-418

PAN: IL0523SS
ILD048843809

SAMPLE: SAS2882E04

SAMPLER: Almanza

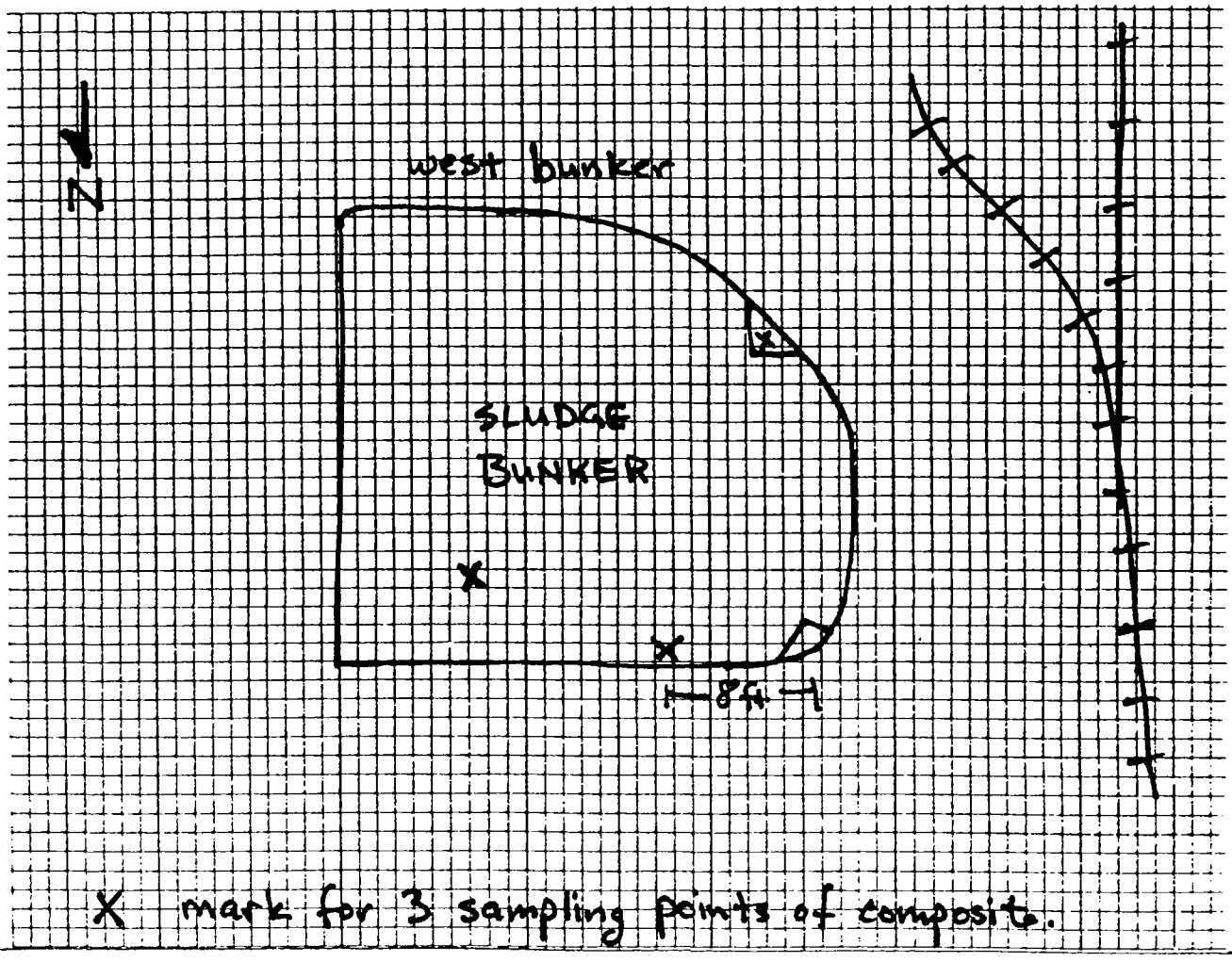
DATE: April 12, 1987

TIME: 0905 (AM) PM

METHOD OF SAMPLE COLLECTION: Composite

PHOTOGRAPHY (including directions): _____

SAMPLE LOCATION



X mark for 3 sampling points of composite.

PAGE _____

SITE: Chemetco, Inc.
Rte 3 and Oldenburg Rd.
Hartford, IL 62202

TDD: F05-8703-418

PAN: IL0523SS
ILD048843809

SAMPLE: SAS2882E01

SAMPLER: Almanza

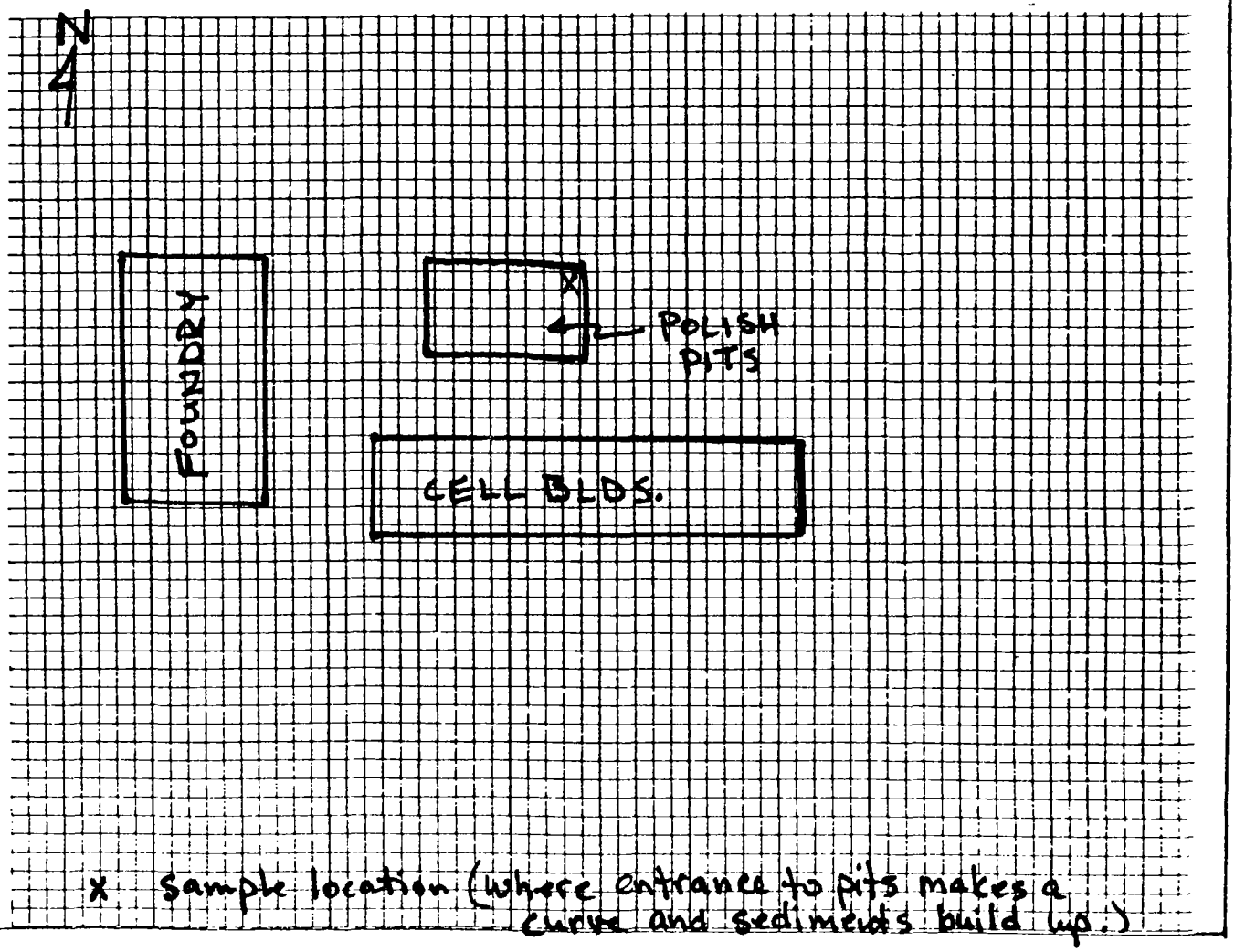
DATE: April 12, 1987

TIME: 0915 (AM) PM

METHOD OF SAMPLE COLLECTION: Grab

PHOTOGRAPHY (including directions): _____

SAMPLE LOCATION



X Sample location (where entrance to pits makes a curve and sediments build up.)

FIELD PHOTOGRAPH LOG SHEET

DATE 4/12/87

TIME 9:15 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boos

SAMPLE ID# (if applicable)
SAS2882E01

DESCRIPTION: Soil sample 01

DATE 4/12/87

TIME 9:15 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boos

SAMPLE ID# (if applicable)
SAS2882E01

DESCRIPTION: Soil sample 01 taken from sludge in polish pit. Grab sample

FIELD PHOTOGRAPHY LOG SHEET

DATE 4/12/87

TIME 9:45 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boor

SAMPLE ID# (if applicable)
SAS2882E02

DESCRIPTION: Soil sample 02

DATE 4/12/87

TIME 9:45 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER sunny 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boor

SAMPLE ID# (if applicable)
SAS2882E02

DESCRIPTION: Soil sample 02 taken from sludge in old recirculation canal, near polish pit. Grab sample.

FIELD PHOTOGRAPHY LOG SHEET PAGE ____

DATE 4/12/87

TIME 10:00 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boo

SAMPLE ID# (if applicable)
SAS2882E05

DESCRIPTION: Soil sample 05 taken from a randomly selected bag of slag catalogued by Chemetco (32T-01).

DATE 4/12/87

TIME 10:00 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boo

SAMPLE ID# (if applicable)
SAS2882E05

DESCRIPTION: Soil sample 05

PAGE _____

SITE: Chemetco, Inc.
Rte 3 and Oldenburg Rd.
Hartford, IL 62202

TDD: F05-8703-418

PAN: IL0523SS
ILD048843809

SAMPLE: SAS2882E02

SAMPLER: Almanza

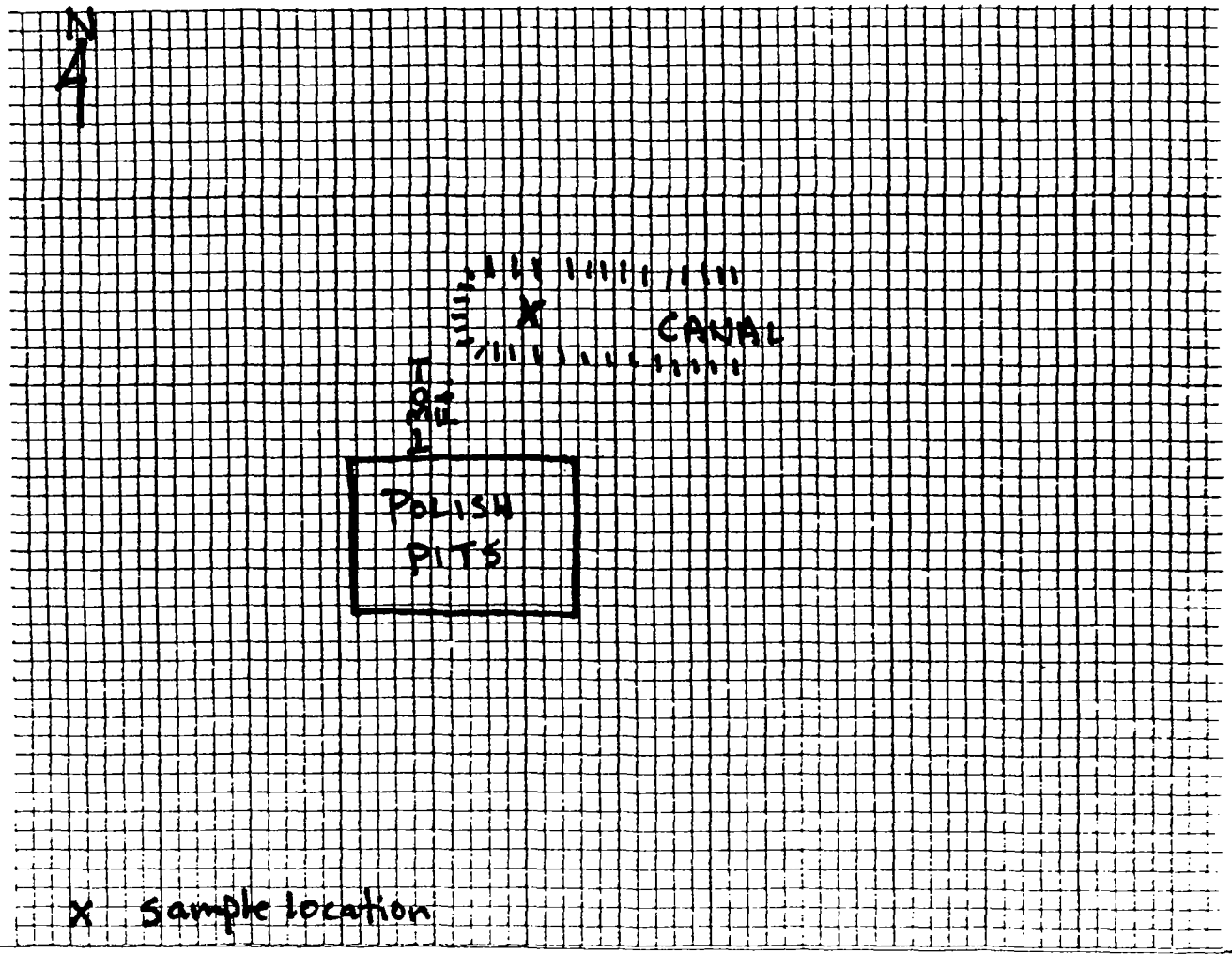
DATE: April 12, 1987

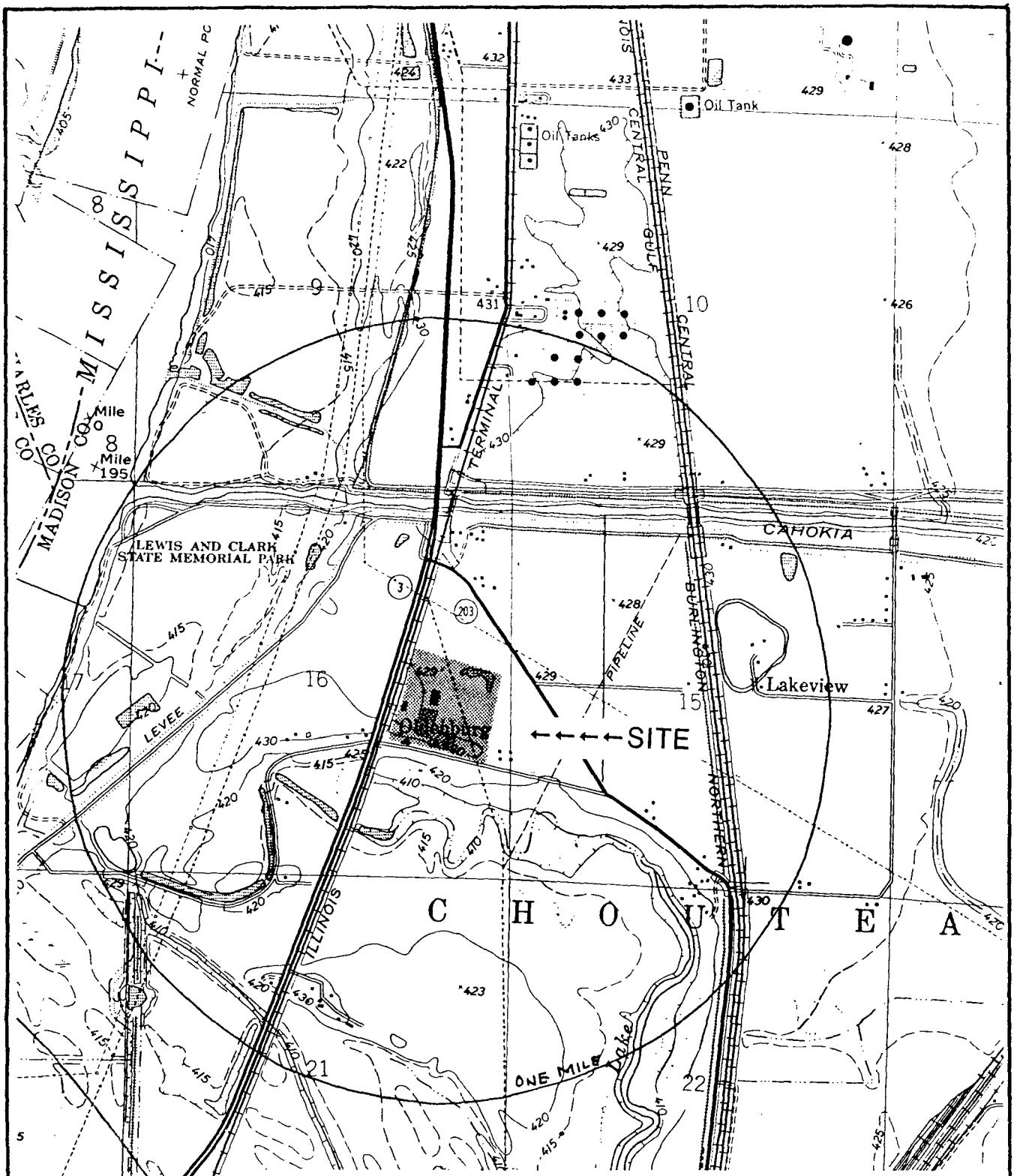
TIME: 0945 (AM) PM

METHOD OF SAMPLE COLLECTION: Grab

PHOTOGRAPHY (including directions): _____

SAMPLE LOCATION





QUADRANGLE LOCATION

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

TITLE: VICINITY MAP	FIGURE #: 1
SITE: CHEMETCO, INC.	SCALE: 1:24000
CITY: HARTFORD, STATE: IL	P.A.N.: ILO523VA
SOURCE: WOOD RIVER, ILL-MO 7.5 MIN QUAD	DATE: 1955
	REVISED: 1968 & 1974

FIELD PHOTOGRAPHY LOG SHEET

DATE 4/12/87

TIME 8:35 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boos

SAMPLE ID# (if applicable)
03 (mismarked 01)
SAS2882E03

DESCRIPTION: Soil sample 03 (mismarked 01)

DATE 4/12/87

TIME 8:35 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny, 55°F, no wind

SITE Chemetco

TDD# F05-8703-418

PHOTOGRAPHED BY:
T. Boos

SAMPLE ID# (if applicable)
03 SAS2882E03

DESCRIPTION: Soil sample 03 taken from five points in the staging area. Composite sample.